



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR 1902.

TO THE

Chairman & Members of Spennymoor Urban District Council.

GENTLEMEN

The area of the district comprises 3,385 acres, and is partly urban and partly rural in character. It is bounded on the *North* by the river Wear; on the *South* by the railway from Merrington Lane to Binchester Colliery; on the *East* by the Darlington road and on the *West* by Whitworth highway from the river Wear to the Binchester railway. The chief industries carried on are connected with coal and iron, and there are brick works at Merrington Lane, and a brick works and saw mill at Tudhoe Colliery. The large iron works belonging to the Weardale Steel, Coal and Coke Coy. have been closed; the works belonging to the Carbo Syndicate have been removed and the Brewery at Tudhoe Grange has not been in operation during the past year. The population according to the census of 1901 was 16,661, the number of inhabited houses 3,204, and the average number of inmates 5. The number of houses erected since then is 39.

The plan of former reports is followed, namely, to place on record:—

- (1) The sanitary work done during the year.
- (2) The present sanitary condition of the district.
- (3) The sanitary requirements of the near future.

Table I at the end of report gives the birth and death rates since 1896, and the average for six years 1896 to 1901 inclusive for comparison with those of 1902. The rates for 1896 to 1900 inclusive have been re-calculated on the population of last census.

Table II gives the number of births and deaths in the various wards extending over the same period and the average number of deaths.

Table III shews the number of infectious diseases notified and their distribution in the three wards.

Table IV shews the causes of and ages at death, in the urban district and also in the various wards.

BIRTHS.

There were 656 births registered in the district during the year, being a rate of 39·2 per 1000 of population compared with 35·6 per 1000 for the Administrative County of Durham.

DEATHS.

There were 286 deaths registered in the district during the year, to which number 6 belonging to the district that occurred in public institutions outside the district have to be added giving a death rate of 17·4 per 1000, considerably lower than that of recent years. The death rate for the Administrative County of Durham was 16·6.

The following table gives the birth and death rates in each of the wards and the urban district for 1901 and 1902 :—

	1901.	1902.	1901.	1902.
	Birth Rate.		Death Rate.	
Spennymoor Ward	44·7	40	29·7	18·2
Ferryhill „	46	43	25·6	18·4
Tudhoe „	32·5	37·4	20	15·7
Urban District	39·2	39·2	24·8	17·4

The next table gives the death rate from zymotic diseases in the wards and urban district for the same year.

	1901.	1902.
Spennymoor Ward	6·9	2·62
Ferryhill „	6·1	2·15
Tudhoe „	4	1·14
Urban District	5·4	1·85

Diarrhœa was prevalent during the last four months of the year and caused 17 deaths distributed as follows :—

Spennymoor Ward	10	equal to	1·6	per 1000	per annum.
Ferryhill „	4	„	1·4	„	„
Tudhoe „	3	„	·38	„	„
Urban District	17	„	1·1	„	„

As usual the *zymotic and diarrhœa death rates* are highest in the Spennymoor and Ferryhill Wards which are the most densely populated. The zymotic death rate and diarrhœa death rates are therefore 1·85 and 1·1 compared with 1·68 and ·31 in the Administrative County of Durham.

Enteric fever—Only one death was registered during the year from this disease.

Measles caused one death, *whooping cough* four, *diphtheria* and *membranous croup* seven, and *continued fever* one. With reference to the deaths from *diphtheria* and *membranous croup* I ought to point out that three of them were notified by an unqualified practitioner, and as the children were dead when I visited the houses there was no opportunity of verifying the diagnosis. X

Phthisis—21 deaths were registered from this disease, equal to a death rate of 1.25 per 1000 per annum.

Infant Mortality—The deaths of infants under one year of age numbered 106, which gives a rate of 161 per 1000 births registered, which is an improvement on previous years. The following table gives the infant mortality rate per 1000 births registered during the last seven years.

	1896	1897	1898	1899	1900	1901	1902
Spennymoor Ward		196	223	196	180	250	189
Ferryhill		135	274	218	143	265	142
Tudhoe		137	189	250	153	196	146
Urban District	190	164	216	223	165	233	161

INQUESTS.

There were 8 inquests held during the year. In 7 cases a verdict of accidental death was returned, and in 1 "suicide by hanging." Two of these deaths were those of children under 5 years of age.

UNCERTIFIED DEATHS.

78 deaths or 27 per cent of the total number occurred during the year the causes of which were neither certified by a registered medical practitioner nor by the Coroner after an inquest being held, and of these 51 were children under 5 years, equal to 34 per cent of the deaths at that age, 14 of these were certified by the Coroner, 7 of them being under 5 years. 64 or 22 per cent of the total number of deaths were uncertified owing to unqualified medical practice and were cases attended by W. Thompson. These included 44 or 30 per cent of all deaths under 5 years of age. X

INFECTIOUS DISEASES (Notification) ACT.

During the past year 169 cases were notified—39 more than in 1901. Of these 124 were *scarlatina*, 16 *diphtheria*, 3 *membranous croup*, 8 *enteric fever*, 1 *continued fever* and 17 *erysipelas*.

Zymotic diseases—There are several causes at work in the district to favour the propagation of these. In the Spennymoor and Ferryhill Wards particularly there are density of houses and population in a small area, and whilst the Council are doing good work in compelling the removal of objectionable privy ashpits one could wish that this work went forward more rapidly. There are still a large number of insanitary midden privies in the district which allow percolation of sewage into the yards and surrounding soil and these in hot summers must be a fruitful source of epidemic, diarrhoea and enteric fever. The number of these cases was small last summer, but this should not cause them to rest satisfied with what has been done as the temperature was low and consequently unfavourable to the development of the organisms which cause these diseases. I have repeatedly called attention to the necessity for covering in and properly ventilating ashpits, and having them so constructed that no leakage can take place. During the year 65 ashclosets have been substituted for midden privies so that their number though still large is gradually being reduced. I understand the Council are considering the advisability of having improved iron doors on the ash-closets, which would be a great improvement, as the present wooden doors are often out of repair and permit filth, etc., to fall into the back streets. Several of the back streets require repairs.—As the traffic on these narrow roadways is continuous and heavy it is necessary that they should be kept in good order and thoroughly scavenged, especially in those districts where the yards are small and houses consequently crowded together. Constant and close supervision over the cleansing of ashpits and scavenging is required, and extra diligence during the summer and when the contracts are nearly out, is necessary.

Measles, although looked upon by many with little concern, causes a large proportion of deaths annually throughout the country. These deaths are generally due to lung complications and parents should see that their children are kept warm and free from draughts during the illness and convalescence. An epidemic broke out at Tudhoe Home where 170 children are boarded and educated. The first case was that of a child who had been admitted from Hartlepool a few days previously. In all there were 18 cases which were isolated in Oakfield House. One case occurred outside the Home—the infection having been got there. This was also isolated and the disease did not spread further. Fortunately there were no fatal cases.

Scarlet Fever again, as in former years, figured largely in the diseases notified, although fortunately causing no deaths. Its continual presence is not a matter for surprise considering

the large working class population and the fact that up till now there has been no hospital or means of isolating patients. The only means of checking it is by *isolating the patients and thoroughly disinfecting the clothing, etc.* Now that the isolation Hospital is completed and equipped with a skilled Nurse, etc., it is to be hoped that parents will recognise and appreciate the benefits offered and not allow any sentimental objections to interfere with what will be for the good not only of the patients themselves but all the children in the district. Up till now there is no doubt that some cases have not been notified and that some are allowed to go out before the "peeling" stage has been completed, not only endangering their own lives but the health of others. It would be well if people were given to understand that the Infectious Diseases (Notification) and Infectious Diseases (Prevention) Acts have been adopted and shall be enforced.

Phthisis caused 21 deaths, and there were 16 from "other tubercular diseases." I repeat what I said in last year's report in the hope that it may encourage the Council to proceed more rapidly with the much needed improvements in many houses in the district. "Although it has long been known and recognised that improved sanitary conditions and surroundings of dwellings reduced the mortality from phthisis, of late years it has been ascertained that the bacillus, which causes the disease, cannot exist or flourish unless in a congenial atmosphere—that whilst dark, damp and ill ventilated dwellings are all in favor of its developement and multiplication. Sunlight and fresh air destroy it: hence the need for plenty of light and ventilation in dwellings. Unfortunately many are deficient in both, for example back to back houses, houses of one room and an attic or sleeping room over it, this attic unceiled, hot in summer and cold in winter, no fire place or other means of ventilation, simply a receptacle for receiving and holding the vitiated air from the living room below. It is impossible that children can grow into healthy men and women under such conditions; instead, they become anæmic and a prey to diseases of a low wasting type, such as tuberculosis in childhood, or phthisis at a later period. There are other conditions that predispose to phthisis, attacks of bronchitis and pleurisy, etc., and debilitating causes such as intemperance, over which the Council have no control, but they can and ought to insist on dwellings having proper light and ventilation. The vitiated atmosphere of an illventilated dwelling produces a low state of vitality which predisposes to disease."

In July, 1901, and again in last annual report, I reported upon houses in George Street, Nos. 145 to 103 inclusive, and regret

that I cannot now report that the alterations and improvements have been carried out. In Nos. 145, 143, 137 and 135, nothing has yet been done to the houses: the conversion of midden privies to ash closets had been commenced, but stopped, and I was informed that the families had been without privy accommodation for about two months. In Nos. 141 and 139, the attics have been ceiled and staircase provided, The kitchen and pantry floors are bad, yards are bad and midden privies still in use. No. 133, the alterations to house have been made, but the yard is bad. No. 131, the work has been done. Nos. 129, 127, 125, 121 and 119, work partly done, kitchen and pantry floors damp, yards bad. Nos. 127, 125, 123, 121 and 119, ash closets are not ventilated. No. 123, work done in house and floor has been cemented, yard and yard walls are bad. Nos. 117 to 103 inclusive, nothing has been done. Nos. 100 to 88 inclusive were reported upon at the same time, in 96, 94 and 94 back the floors are damp, 94 upstairs window defective and in 88 pantry floor is bad.

In May, 1901, I reported upon houses in Park Terrace, Whitworth Colliery. In these attics have been ceiled, floors repaired and gable wall of No. 1 rebuilt. In Nos. 2 and 8, front and back walls are damaged by pitfalls, and rain comes in. In No. 9, front wall is in a similar condition. No. 10, roof requires repair, and in several the doors are defective.

In August, 1901, Thomas Street (back) Nos. 13, 14 and 15, were reported upon. No. 13 is closed, but nothing has been done to make the house habitable, and the out-buildings are in a delapidated condition.

Johnny's Row—Ashclosets have been substituted here for the midden privies. Nothing has been done (worth mention) to the houses. The Magistrates dismissed the case on the ground that the alterations required were not specified on the notice. Some work I understand is about to be done, and these will be reported upon again.

Burnett Street.—Nos. 1 to 5 and 30 to 50 inclusive. These back to back houses have been ventilated and are to that extent improved.

Measures should be taken to secure more prompt attention to notices served on owners of unsanitary property, as there are several blocks yet to be dealt with.

Precautionary Measures—The means taken to prevent the spread of infection are: the adoption of the Infectious Diseases (Notification) Act and the Infectious Diseases (Prevention) Act. The isolation hospital is furnished and provided with an ambu-

lance and disinfecting apparatus. A nurse will be in residence in a few days, and everything in order for the reception of patients.

GENERAL SANITATION.

Spennymoor Ward—The sewage is treated at the outfall near Ox-Close farm. These works have not been able to deal with more than the dry weather flow, but the Surveyor is engaged with plans for their enlargement and improvement.

Burial Accommodation is provided for by the Cemetery at the Four-lane-ends.

Ferryhill and Tudhoe Wards—Some of the yards and conveniences require attention.

Burial Accommodation is provided by the Cemetery at Five-lane-ends.

Cow Sheds—These are registered, and lime washed in May and October.

Slaughter Houses—I have inspected all of these. The floors in some are cracked or otherwise defective, but the owners have promised to put them in order.

No. 26, at 21 Clyde Terrace, occupied by W. Cummings. The yard paving is very bad, and there is an offensive midden privy and ashpit in the middle of the yard, and notice has been served on the owner to have the yard cemented, and an ashcloset to be placed at the rear of the premises, to be substituted for the present arrangement.

No. 25, at 15 Cheapside, occupied by W. H. Coombes. Privy in yard too near house, etc. Notice has been served to provide W.C., or failing that an ashcloset at the rear of premises.

No. 8, at Attwood Terrace, occupied by H. Vester. The ashpit here is open and below yard level. Notice has been served to have it covered in and ventilated, or an ashcloset substituted for it.

No 4, at Half Moon Lane, occupied by W. Orton. The yard is only partially paved with bricks. Notice has been served to cement the yard.

Several butchers continue to put blood etc from slaughtering into middens containing horse manure, etc. As this causes a nuisance and is dangerous to public health, I have suggested that notice be sent to each one, drawing attention to the bye law, and that anyone failing to comply with it in future be prosecuted.

Elementary Schools—Tudhoe Home.—170 girls are boarded and educated here. Automatic flushing trough water closets are in use.

Spennymoor Board Schools—Ashclosets are provided. I have frequently inspected these and never found any nuisance arising from them.

Spennymoor National School. The ashclosets here are satisfactory, but the midden privies are very objectionable.

Spennymoor Wesleyan School—The conveniences here are not satisfactory.

Tudhoe Grange Board School—These have midden privies but owing to the amount of dry ashes and their better distribution I did not find so objectionable as some of the others.

Mount Pleasant National School—Midden privies are in use here, and one of the ashpits is drained into the sewer—a most objectionable arrangement. I have previously drawn attention to this and to the fact that one of the range of privies and ash-pit is too close to the dwelling house. The ashes were not distributed along the pit, simply lying in a heap at one end, and the condition of all was unsatisfactory.

Mount Pleasant Wesleyan School—New privies and ashpit—well constructed—have been erected, but there was a great deficiency of dry ashes to soak up the liquid and nuisance arising in consequence.

Tudhoe Colliery Board School—Midden privies are in use here. The ashes were not distributed—simply lying in a heap at the end of the ashpit. A few of the “down comers” still pass directly into the drains.

Tudhoe Grange R. C. School—Here also there are midden privies, and the ashes were not properly distributed.

Lodging Houses—These are inspected and reported upon. They have been satisfactory during the past year.

Water Supply is from the Weardale and Shildon Company's reservoir, and is a pure water excellent for domestic purposes.

Mode of disposal of excrement and household refuse—A number of houses are provided with water closets, and many have privy receptacles or ash closets, but the prevailing mode is still the privy and ashpit system. Many of these are defective and give rise to nuisances. Year by year a number are being covered in and others are being replaced by ashclosets.

House and yard drainage—Trapping and disconnection from sewers is general.

The general condition of houses of working classes—As a rule with regard to habitability, repairs, dryness, ventilation, overcrowding, closet accomodation, draining and paving of yards, may be considered satisfactory, but in the older parts of the district there are many exceptions, some of which have already been referred to and others are referred to in the list of houses reported upon.

Scavenging of district is done by several contractors who undertake to empty ashpits etc., between the hours of ten p.m. and 8 a.m., and to empty ashpits once a month, and ashclosets twice a week. Constant supervision is necessary to see that this important work is done thoroughly and regularly, and frequently the penalties for neglect have to be enforced.

The following houses were reported upon after inspection—

Burnett Street—Nos. 39 and 40, ashpits and privies in a disgraceful condition. These have been reported before.

Jackson Street—Nos. 1 to 55 inclusive. These are all built upon the same plan, namely, kitchen and pantry on the ground floor, and attic over the kitchen. Most of these attics have a skylight, but the roofs are not ceiled, and in their present condition are not fit for occupation as bedrooms. Many of them are in a bad state of repair, and details were given in the Sanitary Inspectors report.

Proceedings were taken before the Magistrates in reference to Johnny's Row and Crossley Cottage, Jackson Street. An order was made for the erection of an ashpit at the latter house. Repairs are about to be made at Johnny's Row, and if these houses are not put in order the matter will be brought before the Magistrates again.

Sanitary Requirements—Increased works for dealing with the sewage from Spennymoor Ward at Ox-Close. Sewage disposal works for Tudhoe and Ferryhill Wards. The systematic inspection of all houses and yard drain connections. All defective ashpits and privies should be replaced by ashclosets when near dwellings, and others should be covered in and ventilated. Where too large the size should be reduced so as to compel the frequent removal of filth. Until this work is completed there must of necessity be, pollution of soil and air around the dwellings and consequently recurring epidemics of diarrhoea and enteric fever after any continuance of hot weather. Back streets should be repaired and put in order.

FACTORY AND WORKSHOP ACT, 1901.

There are 38 places registered under the above Act in the Urban District, one, a dressmaker, has discontinued work, reducing the total to 37. In a few instances there is not sufficient privy accommodation to meet the requirements of the Act, and in some cases whitewashing is required. I have informed the occupiers of what is necessary in the cases, and if these defects are not remedied I shall report them in detail to the Council.

I wish to point out that the Register is not complete, and that several "workshops" are not registered, and that "work-places" which term includes stable-yards, kitchens of restaurants, and other places where people assemble to work permanently are not registered.

I am,

Your obedient Servant,

ROBERT S. ANDERSON, M.D.

(1) Vital Statistics of Whole District during 1902 and Previous Years.
Name of District—Spennymoor Urban District.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the district	
		N umber	Rate*	Under 1 year of age.		At all Ages.					N umber	Rate*
				N umber	Rate per 1,000 Births regist'r'd	N umber	Rate*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1896	16,665	620	37.2	118	190	334	20			3	337	20.2
1897	16,665	632	37.9	104	164	282	16.9			6	288	17.2
1898	16,665	652	39	141	216	341	20.4			4	345	20.7
1899	16,665	667	40	149	223	385	23.1			10	395	23.7
1900	16,665	664	39.8	110	165	328	19.6			4	332	19.9
1901	16,672	654	39.2	153	233	403	24.1			10	415	24.8
Averages for years 1896-1901	16,666	648	38.9	129	196	345	20.6			6	351	21
1902	16,701	656	39.2	106	161	286	17.1			6	292	17.4

* Rates calculated per 1 000 of estimated population. Area of District in acres (exclusive of area covered by water), 3385.
Total population at all ages 16,665 ; Number of inhabited houses 3,204 ; Average number of persons per house 5 : at Census of 1901.
Institutions outside the District receiving sick and infirm persons from the District :—Union Workhouse, Bishop Auckland ; Union Workhouse, Durham ; County Lunatic Asylum, Sedgfield.

(II) *Vital Statistics of separate Localities in 1902 and previous years.*
Spennymoor Urban District.

NAMES OF LOCALITIES	SPENNYMOOR WARD.				FERRYHILL WARD.				TUDHOE WARD.			
	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages	Deaths under 1 year	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages	Deaths under 1 year,	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages	Deaths under 1 year.
1896	6973		141	45	3019	133	58	22	7864	270	135	37
1897	6973	229	117	58	3019	102	58	28	7864	291	107	55
1898	6973	259	140	51	3019	128	61	28	7864	280	140	70
1899	6973	259	138	47	3019	137	73	20	7864	280	174	43
1900	6685	247	140	68	2705	128	51	35	7900	255	141	50
1901	6052	271	180		2769	128	71		7840		164	
Averages of Years 1896 to 1901	6771		142		2925		62		7866		143	
1902	6066	243	111	46	2777	119	51	17	7858	294	124	43

(III)

**Cases of Infectious Diseases notified during
the Year 1902.**

Spennymoor Urban District.

Notifiable Disease	Cases notified in whole District.						Total Cases notified in each Locality.		
	At all Ages.	At Ages†—Years.					Spennymoor Ward.	Ferryhill Ward	Tudhoe Ward.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.			
Small-pox ...									
Cholera ...									
Diphtheria ...	16		4	11	4		9	2	5
M'branous Croup	3	1	2				1	1	1
Erysipelas ...	17				1	16	14		3
Scarlet Fever ...	124	1	38	80	5		30	22	72
Typhus fever ...									
Enteric fever ...	8			6	1	1	4		4
Relapsing fever	1		1				1		
Continued fever									
Puerperal fever									
Plague ...									
Total ...	169	2	45	97	11	17	59	25	85

Isolation Hospital—Yes.

(IV)

**Causes of, and Ages at, Death during Year
1902.**

Spennymoor Urban District.

Causes of Death.	Deaths in whole District at subjoined Ages.							Deaths in Localities (at all Ages)			Deaths in Public Instit- utions
	All ages	Udr 1.	1 & und 5.	5 & und 15	15 & und 25	25 & und 65	65 & up- wards	Spennymoor Ward.	F'hill Ward.	Tudhoe Ward.	
Small-pox ... ..	..									
Measles	1			1				1			
Scarlet fever . ...	..									
Whooping cough ...	4	4						2	1	1	
Diphtheria and mem- branous croup ...	7		4	3				1	1	5	
Croup	1	1						1			
Fever { Typhus ...	..									
{ Enteric ..	1			1				1			
{ other continued	1			1				1			
Epidemic influenza ...	1						1			1	
Cholera ... ..	..									
Plague ... ..	..									
Diarrhoea	17	14	3					10	4	3	
Enteritis	1					1		1			
Puerperal fever ...	..									
Erysipelas ... ..	..									
Other septic diseases ...	..									
Phthisis	21			3	6	12		6	3	12	
Other tubercular disease	16	7	4	3	1	1		8	4	4	
Cancer, malignant diseases	9		1			4	4	2	6	1	
Bronchitis	36	9	11			6	10	13	7	16	
Pneumonia	13	7	4	1			1	10		3	
Pleurisy	2			1			1	1		1	
Other diseases of Res- piratory organs ...	4					1	3	3		1	
Alcoholism Cirrhosis of liver } ...	..									
Venereal diseases ...	..									
Premature birth ...	20	20						8	2	10	
Diseases and accidents of parturition ...	3				1	2		1	1	1	
Heart diseases ...	13			1	3	4	5	3	2	8	
Accidents	10		2		1	6	1	4	2	4	
Suicides	1					1			1		
All other causes ..	104	44	11	5	2	18	24	34	17	53	
All causes ...	286	106	40	20	14	56	50	111	51	124	

Summary of work done in the Inspector of Nuisances Department during the year 1902, in the Urban District of Spennymoor.

				Number of Informal written Notices by Inspector.	Number of Formal notices by order of Authority.	Number of Nuisances abated after Notice.
I. PUBLIC HEALTH ACTS.						
Dwelling-houses	Foul Conditions	}		96	102	175
‡ and	Structural Defects					
Schools	Overcrowding					
Lodging-houses	...				1	1
Dairies and Milkshops	...	}			81	81
+Cowsheds	...				2	2
Bakehouses	...				90	90
+Slaughter-houses	...			82	47	107
*Ashpits and Privies	...				6	6
Deposits of Refuse and Manure	...				3	3
Waterclosets	...			4	20	24
Defective Yard Paving	...					
House	Defective Traps	}		12	32	44
Drainage	No discon'tions from Sws					
	Other Faults					
Water Supply	...			2	1	3
Pigsties	...			1	2	3
Animals Improperly kept	...				4	4
Offensive Trades	...					
Smoke Nuisances	...				2	2
Other Nuisances	...			315		315
Totals	...			512	393	860

‡ 5 Prosecutions under P.H. Acts during the year. † Cleansing and lime-washing. *65 earth closets, pan closets and water closets have been substituted for open ashpits.

II. Housing of the Working Classes Act, 1890.				Number.	Remarks.
Formal Notices served	...	...		13	
Dwellings dealt with	...	...		40	
Dwellings made habitable after formal notice	...	...		20	
Closing orders applied for	...	...		4	
Closing orders granted by Magistrates	...	...		4	
Dwellings permanently closed	...	...		4	
III. Factory and Workshop Act, 1901.					The majority of these have been inspected.
Action taken, Notices served, &c.	...	...	
V. Precautions against Infectious Disease.					Schools are disinfected twice per week and fumigated with Sulphur four times during the year.
Lots of Infectious bedding stoved or destroyed	...	...		3	
Houses disinfected after Infectious Disease	...	...		86	
Schools	"	"			
Prosecutions for exposure of infected persons or things	...	...	
Convictions for do. do. do. do.	...	...	

